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The Color of Meats and of the Munsell Color Charts Compared

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has formerly been termed "association" and what is now called by Langinescu "molar concentration."

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ABSORPTION SPECTRUM OF VITAMIN A CONCENTRATES

JAY W. WOODROW AND J. B. PHILIPSON

This is a continuation of the work previously reported by Woodrow and Cunningham (Phys. Rev., vol. 35, p. 125, Jan. 1930) on the absorption spectrum of several common sources of vitamin A. Through the kindness of Dr. Morton of the University of Liverpool, it has been possible to investigate the absorption spectra of much more concentrated sources of vitamin A. Slight changes which have been made in the arrangement of the photoelectric spectrophotometer have given more dependable results, partly because they have greatly reduced the destruction of the vitamin A by the ultra-violet light used in taking the measurements. Prominent bands have been found at 310 and 328 mμ. with minor bands at 323 and 340 mμ. The 328 mμ band was much stronger than the same band with weaker sources of vitamin A.

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THE COLOR OF MEATS AND OF THE MUNSELL COLOR CHARTS COMPARED

A. A. BENEDICT

At the present time the most common method of measuring the color of meats consist in a comparison of the surface with a Munsell Color Disc, or a Munsell Color Chart. This method is considered quite satisfactory by some authorities, but its reliability is seriously questioned by others.

This paper is a continuation of the work reported at the Academy meeting a year ago. A great many more readings have been made in which cuts were used that varied quite widely in quality. Also, a comparison has been made between the various Munsell Color Charts, and between cuts of meat and the Color Charts set to match them.

The same discrepancy has been found between the spectrophotometric readings for the meat and the Color Chart which matched it as was previously observed between the readings of the meat and the Munsell Color Disc. But with the Charts the total amount of light diffusely reflected was greater than that from the meat, whereas that from the Disc was less.

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A STUDY OF PHOSPHORESCENT ZINC SULPHIDE SCREENS AND RADIOACTIVITY UNDER EXTREMELY HIGH PRESSURE

THOMAS C. POULTER AND HAROLD MCCOMB

For a study of the effect of pressure on fluorescent zinc sulphide screens, an arrangement very similar to that used in the preceeding paper was employed. In this case the fluorescent zinc sulphide was mounted on the inner surface of the pressure window with a transparent cement.

The pressure was applied to the oil surrounding the screen and the screen illuminated with a 100 watt bulb placed 30 cm. from the screen.

The light was turned out and the phosphorescent glow of the screen observed with a spectroscope.

This procedure was repeated for pressures ranging from one to twenty thousand atmospheres and very little if any effect was observed except that the intensity of the phosphorescence was less at the higher pressures.

However, in all cases where the pressure was rapidly decreased, a very marked increase in the intensity (perhaps two to five fold change) was observed. The intensity immediately dropped to its normal value as soon as the pressure was brought to a constant value.

A similar arrangement was then used in which case the window was coated over one half the field on the inner surface and exposed to the oil pressure while the other half of the window was coated on the outer surface.

In this case the decrease in intensity at higher pressures was made very apparent as was the sudden increase in intensity as the pressure was rapidly lowered.

Since florescent screens are effected so little by pressures up to